	Name of the Trade		Computer Hardware	
S.No.	Name of the item	Std List No.	Type of the item (Tool / Equipment /	Specifications
(i)	(ii)	(iii)	(iv)	(v)
1	Connecting screwdriver 100 mm	1	Tools	Carbon steel construction material, Plastic grip handle, 100mm in length
2	Neon tester 500 V	2	Tools	Maximum 500V tester with neon bulb, Plastic handle
3	Screw driver set (set of 5)	3	Tools	Minimum 5 screw driver blade in leather/plastic case
4	Insulated combination pliers 150 mm	4	Tools	Material high carbon steel, 150mm in size with insulated Material
5	Insulated side cutting pliers 150 mm	5	Tools	Material high carbon steel, 150mm in size with insulated Material
6	Long nose pliers 150 mm	6	Tools	Material high carbon steel, 150mm in size with insulated Material
7	Soldering iron 25 W. 240 V	7	Tools	25W with 100 to 240VAC maximum voltage with insulated handle
8	Electrician knife	8	Tools	5" in size and repalceable 3.5" blade
9	Tweezers 100mm	9	Tools	100mm insulated
10	Digital Multimeter	10	Tools	3.5"LCD display, Maximum range of 1000VDC, 750VAC & 10A AC/DC, Maximum range of 10MΩ
11	Soldering Iron Changeable bits 15 W	11	Tools	15W with with insulated handle, 100 to 240VAC maximum voltage & changeable bits
12	De- soldering pump	12	Tools	Changeable teflon tip
13	Crimping tool (pliers)	1	Tools	7.5" steel construction body suitable for 22–26 AWG wires, ratchet mechanism, 8p8c/RJ45, 6p6c/RJ11 plugs
14	Soldering Iron 25W	2	Tools	25W with 100 to 240VAC maximum voltage
15	Magneto spanner set	3	Tools	Set with 8 spanners of high carbon steel
16	Screw driver 150mm	4	Tools	Carbon steel construction material, Plastic grip handle, 150mm in length
17	Steel rule 150mm	5	Tools	Size 150mm to read in inch/mm with english & metric conversion
18	Scriber straight 150mm	6	Tools	150mmx4mm in size, Knurled center postion, High carbon steel forge hard & tempered
19	Soldering Iron 240W	7	Tools	240W with 100 to 240VAC maximum voltage with insulated handle
20	Allen key set (set of 9)	8	Tools	Allen key with different 9 sizes (1.5, 2, 2.5, 3, 4, 5, 6, 8 & 10mm)
21	Tubular box spanner (set of 6nos)	9	Tools	Spanner socket with speed handle, T-bar, ratchet and universal upto 32mm set of 28 pieces with in box
22	Magnifying lenses 75mm	10	Tools	75mm with hard plastic handle
23	Continuity tester	11	Tools	Continuity tester with LED 1.5 V battery
24	Soldering iron 10W	12	Tools	10W with 100 to 240VAC maximum voltage with insulated handle
25	Cold chisel 20mm	13	Tools	20mm in size, High carbon steel forge hard & tempered
26	Scissors 200mm	14	Tools	200mm in size, High carbon steel with handle
27	Handsaw 450mm	15	Tools	450mm in size with wooden/plastic grip handle
28	Server Computer	1	Equipment	Latest 32\64 bit processor higher with PCI Express Video card 4GB VRAM , 4GB RAM expandable ,19"TFT keyboard,Mouse ,DVD OR BLU-RAY WRITER with latest paper license of OS -server edition,Internet,Antivirus\Total security-Server edition and UPS for power, firewall supported
29	Desktop Computer	3	Equipment	i700(i7)PROCESSOR or Quad core of Higher 8 GB RAM,1 Terabyte HDD ,22"TFT Monitor101 DVD OR BLU-RAY WRITER KEYBORD\INTERNET,USB Optical Mouse,USB keyboard with latest license of OS
30	a)Laptop b)Notebook	4	Equipment	a)LAPTOP : Intel i-7processor forth generation 3.0GHz with 4MB Cache, 8GB DDR3/1600Mhz RAM, 1TB 5400RPM SATA Hard Drive, 15.6" LED Display, 2GB dedicated RAM , Wi-Fi, Blue-tooth, minimum 2 USB 3.0 & 1 USB 2.0 ports, Windows 8 or latest version OS b)NOTEBOOK : Intel i-7 processor forth generation 3.0GHz with 4MB Cache, 8GB DDR3/1600Mhz RAM, 128GB SD HDD, 14" LED Display,2GB dedicated RAM , Wi-Fi, Blue-tooth, minimum 2 USB 3.0 & 1 USB 2.0 ports, Windows 8 or latest version OS
31	Intel Mobile Desktop based PC with LCD monitor	5	Equipment	Intel i5 processor 4th generation 3.0 GHz with 6 MB Cache, 4GB RAM, 1TB HDD with 64MB buffer, 17" TFT/LED monitor, USB 101 Keyboard & USB optical mouse, Windows 8.1 OS & Antivirus
32	Printers: Laserjet, deskjet, passbook, mfd	6	Equipment	Laser : 32MB Standard Memory, Resolution : Mono 600x600 dpi, Paper Size A4, Print speed (A4 Size): 25 ppm, 1 Page Out Time : 7 Sec., Port : 1 Hi-Speed USB 2.0, Network card 10/100, Duplexing, Windows 8 & Mac OS Compatible; Deskjet : Page per min-32/31(black/color), up to 4800 optimize DPI color, high speed USB, Window 8 or above Compatible; MDF : Printer type : Laser, Mono/Color : Mono, Minimum printing speed (ppm) : 25, category : Duplex, ADF/DADF : DADF, Networking : Yes, Fax : Yes;

33	Network Printer	7	Equipment	32MB Standard Memory, Resolution : Mono 600x600 dpi, Paper Size A4, Print speed (A4 Size): 25 ppm, 1 Page Out Time : 7 Sec., Port : 1 Hi-Speed USB 2.0, Network card 10/100, Duplexing, Windows 8 & Mac OS Compatible
34	5KVA online UPS	9	Equipment	On-Line with isolation transformer, for single phase AC input & single phase AC output, Rating : 5.0 KVA, Inductive back-up time : Minimum 30 minutes on full load, UPS Floor Mounted Type, Indicators : Over Temperature. , Battery Low, Main On & Inverter On Indicators (audible or visual), Input Voltage Protection, Input Under Voltage Protection & Input Cut-off Protection, Output Over Voltage Protection, Output Under Voltage Protection, Over Load Protection, Short Circuit Protection, Sealed maintenance free lead acid dry batteries of 12V
35	LAN Cards, Wi-fi LAN Cards	10	Equipment	DFE-520TX 10-100Mbps PCI Adapter
36	LCD/DLP Projector	11	Equipment	Multimedia Projector with wireless connectivity between PC and Projector, Projection system : 3 LCD panels, Lamp : 210W, Brightness : 3000 luminous, Dynamic contrast ratio : 2300:1 (Full white/full black), Display resolution : 1280x800 dots, Color system NTSC, PAL, SECAM, Input video connector : HDMI 19-pin, D-sub 15-pin, USB, RJ-45 & Wi-Fi, Output video connector : D-sub 15-pin, Sound output : 16W
37	Power Meter	12	Equipment	Silicon detector, 0 dBm to -60 dBm range, 12 mm LCD display, 660 & 950nm Wavelength, 0.5 Minimum dBm accuracy, 9 V Battery power operation
38	Crimping Tools	13	Equipment	7.5" steel construction body suitable for 22–26 AWG wires, ratchet mechanism, 8p8c/RJ45, 6p6c/RJ11 plugs
39	Computer Toolkits	14	Equipment	Magnetic Screw Driver with 32 different screw driver
40	Computer Spares:	15	Equipment	
41	Motherboards (of different make)	16	Equipment	Supports with Intel & AMD processors
42	Cabinets	17	Equipment	Computer cabinets ISI standard make
43	Processors (of different make)	18	Equipment	Intel & AMD make, Dual core & quad core with different frequencies
44	Hard Disk (500 GB or better)	19	Equipment	Internal, Interface: USB 2.0 & eSATA
45	Optical Drives	20	Equipment	Internal, Interface: USB 2.0 & eSATA
46	LCD/LED Monitors	21	Equipment	17" wide size, 5ms response time, on screen Luminance, Image Setup, Color Temperature, Color Boost, Picture Boost, OSD Setup, Extra, Reset, Exit controls, 700"1 contrast ratio, 200Cd/m2 luminance, 16.7M color, 100-270VAC, 50 Hz power supply
47	Pen Drives	22	Equipment	32Gb with USB 2.0 port connector
48	External Hard disk	23	Equipment	USB 3.0 and USB 2.0 compatibility, 500Gb or more capacity,
49	External DVD Writer	24	Equipment	USB 3.0 and USB 2.0 compatibility, 500Gb or more capacity
50	Keyboards	25	Equipment	101 Keys, ps2/ USB compatibility
51	Mouse	26	Equipment	Optical mouse with three button , USB compatibility
52	Anti static pads	27	Equipment	Electro-Static Discharge (ESD), 490 x 600mm in size, Compatible with 60cm anti-static wrist strap
53	Anti static wrist wraps	28	Equipment	Conductive elastic! 360 degree conductivity, Hypoallergenic metal contact plate, Heavy Duty 3/8" socket and stud, Banana plug PLUS alligator clip for use on ALL grounds, EIGHT FOOT Cord standard (fully extended).
54	SMPS	29	Equipment	230VAC 50/60Hz input, +3.3V/25A, +5V/0.3A, +12V/17A, -12V/0.8A, +5V/2A DC output
55	Digital Multimeters	30	Equipment	3.5"LCD display, Maximum range of 1000VDC, 750VAC & 10A AC/DC, Maximum range of 10MΩ
56	Blu-Ray drive and player	31	Equipment	Serial ATA Interface,5.25 inch Form Factor,16x DVD+R Read, 24x DVD+R Write,48x CD-R Write,40x CD-RW Read, 24x CD-RW Write,DVD Rewriter,0.75 MB Buffer Memory
57	External Hard Disk	32	Equipment	USB 3.0 and USB 2.0 compatibility, 500Gb or more capacity
58	Digital Camera	34	Equipment	20 Megapixels, CCD sensor technology, 10x optical zoom, 4x digital zoom, Min shutter speed 1 sec., Max shutter speed 1/2000 sec., ISO 20 - 2000 light sensitivity, Digic 4 digital processor, 2.7" display size
59	HD Display	35	Equipment	22" wide size, 1920x1080 resolution, 5ms response time, on screen Luminance, Image Setup, Color Temperature, Color Boost, Picture Boost, OSD Setup, Extra, Reset, Exit controls, 700"1 contrast ratio, 200Cd/m2 luminance, 16.7M color, 100-270VAC, 50 Hz power supply ,wi-fi connectvitiy
60	Network storage	36	Equipment	Number of Drives:2, Capacity Range 3 TB, Performance 41.5 MB/s CPU 600 MHz Single Issue ARM Memory 64 MB DDR2
61	Card Reader	37	Equipment	Multi-in-one card reader, USB 2.0 compatible, SD & MMC SLOT: SD, Mini SD compatible
62	Game video card	38	Equipment	2GB DDR3 PCI-E Graphic Card HDMI DVI VGA GT 610

63	Web Cam	39	Equipment	Image Control Color saturation, brightness, sharpness and brightness is adjustable; Snap shot switch for taking stil pictures , Anti-flicker 50Hz, 60Hz or outdoor; Resolution Hardware: 500K pixels; Image Quality: RGB24 or I420
64	Surround sound speakers	40	Equipment	Rated Frequency Range (Hz) 40Hz ~ 20KHz,Maximum Power 25W (RMS), Impedance 8 ohms, Input Voltage 100-270VAC
65	Different types of memory cards	42	Equipment	32Gb standard SD & mini SD cards
66	Laptop kits	43	Equipment	Screen cleaner, wireless mouse,Laptop bag for 17" screen laptop, Headphone, Cleaning kit and Key Guard
67	Laptop spares: Cabinet with display, memory, hard disk, battery pack, keyboard membrane, chargers	44	Equipment	Cabinet with 14" display, 4GB DDR-3 memory, 1TB hard disk, battery pack, keyboard membrane, chargers
68	SMPS Trainer kit	47	Equipment	Input : 80 to 230 V AC ±10%, 50 / 60 Hz,Outputs : +5 V and ±12 V DC regulated,Switching Transformer : Input : 320 V DC switching at 132 KHz,Output : 30 V AC (approx), Fuse : 500 mA (Slow blow)
69	UPS Trainer kit	48	Equipment	I/P -12 V, 24 AH battery set , O/P-230 v, 50 Hz, square wave, Load-Tube light, lamp, PC upto 250 VA, battery set is supplied for 30-min backup time
70	Power electronics Trainer kit	49	Equipment	Light Intensity Control using SCR & Triac, Firing Circuit, Commutation Techniques, Phase Control using Triac, SCR Single Phase Half Wave, Full Wave, Fully Controlled Bridge Rectifier/ Converter, DC Motor Control using SCR (with Techometer), Single Phase Cycloconverter
71	Post error debugging card	50	Equipment	PCI bus compatible, POST code display, Power On Self Test (POST) status codes, compatible with windows xp, vista & 8.0
72	SMPS Tester	51	Equipment	Voltage test: +12V, -12V, +5V, -5V, +3.3V, 5V stand by (SB) 12V, power good (PG), Voltage Source: 20/24pin (ATX-connector), Voltage Test: +3.3V, +5V, +VSB, -5V, -12V and +12V.
73	PCI slot Testing tool	52	Equipment	PCI slot Testing card, compatible with windows xp, vista & 8.0
74	Windows Server Operating System	1	Software	Windows Server Operating System 8 (64-bit) or latest having with licences
75	Windows Operating System	2	Software	Windows Operating System 8.0 or 8.1 (64-bit) or latest having with licences
76	Linux Operating System	3	Software	Open source
77	Network Management Software	4	Software	Network Management Software with licences
78	MS Office	5	Software	Microsoft Office 13 (academic version) or latest with licences
79	Anti virus software	6	Software	Total security with 3 year validity
80	Data recovery software	7	Software	Recover & Save Permanently Deleted Files and Folders from Hard Drive, Supports formatted Partition recovery – FAT and NTFS Partition, Recover data from any Internal / External Storage Media, 3 Recovery Options: Recover Normal Data, Deleted Data, Formatted Partition, Recovery from Windows 8.1, Win 8, Win 7, XP, 2000 & below versions with licences
81	Computer Tables	1	Furniutre & Equipment	Computer Table of size – 4 feet length X 2 feet width X 2.5 feet height. Computer Table top make of both sides pre-laminated board The edges of the compute table top to be covered with PVC beading. Computer table will be provided with sliding key board
82	Computer Chairs	2	Furniutre & Equipment	The seat and back are made up of 1.2 cm thick hot pressed plywood, upholstered with fabric and moulded Polyurethane foam with PVC lipping all around.(MID BACK) SIZE: 40.0cm. (W) X 45.0cm. (H) SEAT SIZE: 43.0cm. (W) X 39.0cm. (D) The HR Polyurethane foam is moulded with density=45+/-2 kg/m cube and hardness load 16+/-2 kgf as per IS:7888 for 25% compression. The permanent contact mechanism is designed with 360° revolving type.14° maximum back-tilt only.Upright position locking.Tilt tension adjustment. The pneumatic height adjustment has an adjustment stroke of 12.0 cm.The bellow is 3 piece telescopic type and injection moulded in black Polypropylene. The pedestal is injection moulded in black 30% glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is 61.0cm. pitch-center dia. (71.0 cm with castors).The twin wheel castors are injection moulded in Black Nylon. Color:blur/red
83	Printer Table	3	Furniutre & Equipment	650 x 500 x 750mm ,sunmica topwith 19 mm thick commercial board finished with approved laminate on top The edges of table top to be covered with PVC beading

84	Class room chairs	4	Furniutre & Equipment	Two seater desk cum bench of overall size 1048Wx895Dx750H(mm), Seat height 437mmHx335mmD. Desk/Seat/Back top panel made up of 18mm thick Greenguard compliant prelaminated board with PVC edge banding all over. Understructure made up of 25.4mmx25.4mmx1.2mm thick square powder coated ERW tube at base that are welded to the desk and seat supports that are made up of 1mm thick powder coated MS'c section. Storage shelves made up of 0.6mm thick powder coated MS sheet which is affixed below the desk top. Hooks are provided on either side of the vertical frame of desks. Understructure is assembled using M-5 tap tite screws. Color : Grey
85	Air conditioners (optional)	5	Furniutre & Equipment	Split Air Conditioner, Capacity 1.5 Ton, Auto Clean/Blow Function, Cooling, R290 Refrigerant, Indoor Sound Level: 48 dB (A), Auto Mode, Sleep Mode and Turbo Mode, Air Purifier, Silver Ion Filter and Dust Filter, Front Panel Display: LED Display, Timer On/Off; Air Swing; Auto Clean; LCD remote control; Stepped Louvers, Energy Efficiency Ratio: 3.7 W/W, Indoor Dimensions: Width 940 mm Heigh 200 mm, Depth 298 mm, Net weight 17 kg Outdoor Dimensions: Width 820 mm Heigh 300 mm, Depth 540 mm, Net weight 41 kg with steblizer
86	Scanner	6	Furniutre & Equipment	Scanner type:Flatbed,Scan resolution, optical:Up to 4800 dpi,Task speed:10 x 15 cm (4 x 6 in) color photo to file (200 dpi, 24-bit, tiff): about 21 sec for single image scan,Scan size (flatbed), maximum:8.5 x 11.7 inch
87	Modem	7	Furniutre & Equipment	frequencies from 28.8k bps to 56k bps,RJ ports, 10 solts
88	Telephone Line	8	Furniutre & Equipment	Telephone Line
89	Broadband Internet connection	9	Furniutre & Equipment	2mpbs with unlimted downloading
90	Fire fighting equipments	10	Furniutre & Equipment	fire extinguisher ABC 5 Kg specification 1.6mm,hydraulic test pressure 30 bar, temprature range 0-60 degree celcius, jet range 4mm max. period of discharge 25 sec, min discharge quantity 85%
91	Hardware and Network Trainer Kit	11	Furniutre & Equipment	PIC32 Controller, Power Over Ethernet (PoE), 10/100 Mbps Network Connectivity, Audio Amplifier and Speaker Interface, High Fidelity USB Microphone, Mass Storage Device 16X2 Character LCD Interface, Power Injector, Power Sourcing Device, Network Cables, 2 Pin Power Output, Optional Digital I/Os, Optional Hardware, Network Router, 8 Port Network Switch, Hardware Debugger
92	Wireless Network Adapter	1	Tools & Equipment	Dual Band Wireless N900 PCI Express Adapter, 2.4GHz 450Mbps/5GHz 450Mbps, IEEE 802.1a/b/g/n, WEP/WPA/WPA2
93	Wireless Access Point	2	Tools & Equipment	Frequency range: 2.4-2.4835GHz,Wireless transmit power: 14 ~17 dBm (Typical),Product dimensions: 11 * 6 * 7cm,Power supply unit: 100V-240V AC
94	Router	3	Tools & Equipment	Processor RISC, Default DRAM[1] memory 32 MB, WAN,LAN Four-port 10/100BASE-T with autosensing MDI/MDX for autocrossover, External power supply-Universal 100-240 VAC
95	Managed Layer 2 Ethernet Switch 24 port	4	Tools & Equipment	Ethernet Switch 24 port
96	Managed Layer 3 Ethernet Switch 24 port	5	Tools & Equipment	3 Ethernet Switch 24 port
97	Network Training System	6	Tools & Equipment	Network Training System
98	LAN Protocol Simulation and Analyser Software	7	Tools & Equipment	LAN Protocol Simulation and Analyser Software
99	Network and Internet security trainer	8	Tools & Equipment	Network and Internet security trainer
100	LAN cable tester	9	Tools & Equipment	Test correspondingly double-twisted cables 1, 2, 3, 4, 5, 6, 7, 8 and Ground, Comprisable Tester for RJ11, RJ12, RJ45, Cat 5e, Cat 5, 10/100 Base-T
101	Network cables – UTP	10	Tools & Equipment	Cat-5 & Cat-6 untwistted pair cable
102	Network Cables – coaxial, flat, ribbon	11	Tools & Equipment	18 standard wire gauge of coaxial cable
103	LAN Cards, wi-fi LAN Card	12	Tools & Equipment	10-100Mbps PCI Adapter
104	Connectors for cables	13	Tools & Equipment	Connectors for cables
105	Power Meter	14	Tools & Equipment	Silicon detector, 0 dBm to -60 dBm range, 12 mm LCD display, 660 & 950nm Wavelength, 0.5 Minimum dBm accuracy, 9 V Battery power operation
106	Media Convertor	15	Tools & Equipment	Multimode Media Converter,convert 100BASE-FX fiber to 100Base-TX
107	24 port UTP jack panel	16	Tools & Equipment	Size 482x44x88mm, 1U, 19" rackmountable
108	SC Couplers	17	Tools & Equipment	SC, Rectangular Mounting, Multimode, Duplex, Bronze Sleeve, Plastic
109	SC Pigtails	18	Tools & Equipment	Fiber Optic Jumper, 1 F, Pigtail to SC APC, Tight-Buffered Cable, Riser, 900 µm

110	RJ-45 connector	19	Tools & Equipment	RJ-45 connector
111	Fluke Meter	20	Tools & Equipment	Media Access; Copper : RJ-45: 10BASE-T, 100BASE-TX, 1000BASE-T and PoE (IEEE 802.3af and 802.3at); 100BASE FX and 1000, Media Access; Fiber : SFP Adapter Port supports 100BASE-FX and 1000BASE-LX/ SX/ZX, Cable Tests : Pair lengths, opens, shorts, splits, crossed, straight through and cable ID, Tone Generator : IntelliTone digital tone: [500 KHz]; analog tones: [400 Hz, 1 KHz], Display : 2.8 in color LCD (320 x 240 pixels), Keypad : 12-key elastomeric, LEDs : 2 LEDs (Link and Receive/Transmit indicators), Host Interface : USB 5-pin mini-B
112	Crimping Tools	21	Tools & Equipment	7.5" steel construction body suitable for 22–26 AWG wires, ratchet mechanism, 8p8c/RJ45, 6p6c/RJ11 plugs
113	Switch with POE ports	22	Tools & Equipment	Ports-24 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T with 4 shared Gigabit SFP slots, PWR, Fan, Link/Act, PoE, Speed, RPS
114	POE adapters	23	Tools & Equipment	IEEE 802.3af compliant,Auto-determine the necessary power requirements,Gigabit speed support,Plug-and-Play, requires no configuration
115	Network Camera (Outdoor / Indoor)	24	Tools & Equipment	Sensor:CMOS,Sensor Size:1/3 Inch Color CMOS Sensor,Lens (mm):4mm@ F2.0,Viewing Angle (Degree):86°, 5 Video Frame Rate (FPS):50Hz:20fps (2048x1536), 5fps(1920x1080),25fps(1280x720);60Hz:20fps ,2048x1536),30fps(1920x1080),30fps(1280x720) 6 Environment:Indoor